

Application No.: 10/782,574

Docket No.: JCLA12196

REMARKS**Present Status of the Application**

Claims 1-14 were previously pending. In the Office Action dated August 18, 2005, the Examiner rejected claims 1-7, 10, 11, 13 and 14 under 35 U.S.C. 102(b) as being anticipated by Ramanujan et al. (US-2002/0118375, hereinafter Ramanujan); rejected claims 8, 9 and 12 under 35 U.S.C. 103(a) as being unpatentable over Ramanujan in view of Hansen et al. (US-6,666,556, hereinafter Hansen).

Applicants have added new claim 15 for the Examiner's consideration. Applicants respectfully submit that at least for the following reasons claims 1-15 patently define over prior arts of record. Reconsideration is respectfully requested.

Discussion of the claim rejection under 35 USC 102

The Office Action rejected claims 1-7, 10, 11, 13 and 14 under 35 U.S.C. 102(b) as being anticipated by Ramanujan et al. (US-2002/0118375, hereinafter Ramanujan).

Applicants respectfully disagree and traverse the above rejections as set forth below.

The present invention is generally related to optical projection system. Particularly, claim 1 recites, among other things, [a first wire grid polarizer (WGP), a second WGP and a third WGP, for respectively receiving and polarizing the first, second and third light beams and respectively reflecting the polarized beams to a first liquid crystal reflection panel, a second liquid crystal panel and a third liquid crystal panel, wherein the first, second and third liquid

Application No.: 10/782,574

Docket No.: JCLA12196

crystal panels are respectively positioned substantially parallel to the first, second and third surfaces of the color combination prism, and wherein the first, second and third liquid crystal panels respectively receive the polarized light beams from the first, second and third WGPs and reflect polarized light beams to the first, second and third surfaces of the color combination prism]. The advantage of the above feature is that at least not only the deviation of the light path of polarized beam entering into the color combination prism due to deformation of the WGP may be effectively reduced but also the polarization of the incident light may be substantially improved and thereby effectively reduce light leakage problems.

Applicants respectfully submit that the proposed independent claim 1 is allowable over Ramanujan because Ramanujan substantially fails to teach or disclose each and every feature of the claimed invention. More specifically, Ramanujan fails to teach or disclose an optical projection system comprising at least [a first wire grid polarizer (WGP), a second WGP and a third WGP, for respectively receiving and polarizing the first, second and third light beams and respectively reflecting the polarized beams to a first liquid crystal reflection panel, a second liquid crystal reflection panel and a third liquid crystal reflection panel, wherein the first, second and third liquid crystal panels are respectively positioned substantially parallel to the first, second and third surfaces of the color combination prism, and wherein the first, second and third liquid crystal reflection panels respectively receive the polarized light beams from the first, second and third WGPs and reflect polarized light beams to the first, second and third surfaces of the color combination prism], as required by the amended proposed independent claim 1.

Application No.: 10/782,574**Docket No.: JCLA12196**

Instead, Ramanujan, at FIG 3a, paragraphs [0063]-[0065], substantially discloses [0063] In FIG 3a, a first polarizing beamsplitter prism 82, a second polarizing beamsplitter prism 84 and a third polarizing beamsplitter prism 80. Thus, it is clear, as the name of the element indicates, and as clearly shown in FIG 3, that each of the first, second and third polarizing beamsplitter (PBS) prisms (82, 84 and 80) are composed of two prisms. In other words, Ramanujan fails to at least teach or disclose the first, second and third wire grid polarizers (WGPs) (each of which is generally comprised of a plurality of wire grids having an interelement spacing of less than one wavelength supported by a substrate of electrically insulative material) as specified in claim 1 of the claimed invention, instead Ramanujan substantially teaches or discloses the first, second and third polarizing beamsplitter prisms (82, 84 and 80), each of which is composed of two prisms. Therefore, Ramanujan cannot possibly anticipate claim 1 in this regard.

According to the present inventors, the PBS prisms has several disadvantages, in that, when a two dimensional light is incident thereon, each of the two split lights are not of pure polarization states but rather mixture of both states as illustrated in Fig. 2 and FIG. 3B. Thus, light leakage usually occurs that would adversely affect the product quality. In order to overcome this light leakage problem, the present inventors propose using WGPs instead of PBS prisms.

Applicants would like to particularly point out that because Ramanujan substantially teaches using PBS prisms for polarizing the light beams, therefore it is clear that Ramanujan fails to recognize the light leakage problems associated with use of PBS prisms for polarizing light as described above. Thus, the device of Ramanujan cannot possibly anticipate every features of the claimed invention as claimed in claim 1 in this regard.

Application No.: 10/782,574

Docket No.: JCLA12196

Furthermore, because Claim 10, which is directed to an optical projection method, also recites features similar to claim 1, therefore Claim 10 also patently define over Ramanujan for at least the same reasons discussed above.

Claims 2-7, and 11, 13 and 14, which directly or indirectly depend from Claims 1 and 10 respectively, are also patentable over Ramanujan, at least because of their dependency from an allowable base claim.

For at least the foregoing reasons, claims 1-7, 10, 11, 13 and 14 patently define over Ramanujan. Reconsideration and withdrawal of these rejections is respectfully requested.

Discussion of the claim rejection under 35 USC 103

The Office Action rejected claims 8, 9 and 12 under 35 USC 103(a) as being unpatentable over Ramanujan in view of Hansen et al. (US-6,666,556, hereinafter Hansen).

Applicants respectfully disagree and respectfully submit that the polarizer of Hansen still can not cure the specific deficiencies of Ramanujan as substantially discussed above. Therefore, Applicants respectfully submit that no combination of Ramanujan and Hansen, in a manner suggested by the Examiner, could possibly meet the claimed invention in this regard. Accordingly, claims 8, 9 and 12 also patently define over Ramanujan and Hansen for at least the same reasons discussed above. Reconsideration and withdrawal of these rejections is respectfully requested.

New Claim

New claim 15 depends on claim 9 and is believed patentable over the cited prior art.

Application No.: 10/782,574

Docket No.: JCLA12196

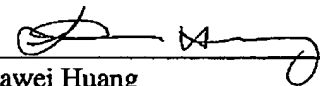
CONCLUSION

For at least the foregoing reasons, it is believed that all the pending claims 1-15 of the present application patently define over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

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